Connecticut Siting Council

Application Guide for an

ELECTRIC GENERATING FACILITY

July 2012

This application guide is designed to assist applicants in filing for a Certificate of Environmental Compatibility and Public Need (Certificate) from the Connecticut Siting Council (Council) for the construction of an electric generating facility. Such facilities are defined in the Connecticut General Statutes § 16-50i (a) (3).

Applicants are urged to carefully review Connecticut General Statutes § 16-50k to determine whether the proposed project falls within the petition for declaratory ruling process. Applicants are also urged to carefully review Connecticut General Statutes § 22a-20a to determine whether the proposed project is defined as an "affecting facility" that is located within an "Environmental Justice Community."

Applicants should consult Connecticut General Statutes §§ 16-50g through 16-50aa, and §16a-7c, and Sections 16-50j-1 through 16-50z-4 of the Regulations of Connecticut State Agencies to assure complete compliance with the requirements of those sections. Where appropriate, statutory and regulatory references are noted below.

I. <u>Pre-Application Process</u>

A. Municipal Consultation (Conn. Gen. Stat. §16-501 (e))

"...at least 60 days prior to the filing of any application with the Council, the applicant shall consult with the municipality in which the facility may be located and with any other municipality required to be served with a copy of the application under subdivision (1) of subsection (b) of this section [any adjoining municipality having a boundary not more than 2500 feet from such facility] concerning the proposed and alternative sites of the facility.....Such consultation with the municipality shall include, but not be limited to, good faith efforts to meet with the chief elected official of the municipality. At the time of the consultation, the applicant shall provide the chief elected official with any technical reports concerning the public need, the site selection process and the environmental effects of the proposed facility. The municipality may conduct public hearings and meetings as it deems necessary for it to advise the applicant of its recommendations concerning the proposed facility. Within 60 days of the initial consultation, the municipality shall issue its recommendations to the applicant. No later than 15 days after submitting the application to the Council, the applicant shall provide to the Council all materials provided to the municipality and a summary of the consultations with the municipality including all recommendations issued by the municipality."

"...the applicant shall submit to the Connecticut Energy Advisory Board (CEAB) the same information that it provides to a municipality... on the same day of the consultation with the municipality."

B. Application to Municipal Agencies (Conn. Gen. Stat. § 16-50x (d))

Municipal zoning and inland wetland agencies may regulate and restrict the location of an electric generating facility. Such action must be taken within 65 days of an application filed with the Council. Orders made by the municipal zoning and inland wetland agencies may be appealed within thirty days by any party or municipality required to be served with a copy of the application.

II. Form of Application (Regs. Conn. State Agencies §16-501-2)

All applications shall include the following components:

- a. The purpose for which the application is being made;
- b. The statutory authority for such application;
- c. The exact legal name of each person seeking the authorization or relief and the address or principal place of business of each such person. If any applicant is a corporation, trust association, or other organized group, it shall also give the state under the laws of which it was created or organized;
- d. The name, title, address, and telephone number of the attorney or other person to whom correspondence or communications in regard to the application are to be addressed. Notice, orders and other papers may be served upon the person so named, and such service shall be deemed to be service upon the applicant;
- e. Such information as may be required under the applicable provisions of Section 16-50*l* of the Connecticut General Statutes;
- f. Such information as any department or agency of the state exercising environmental controls may, by regulation, require; and
- g. Such information as the applicant may consider relevant.

III. Filing Requirements (Regs., Conn. State Agencies § 16-50j-12)

- A. Except as may be otherwise required, at the time applications are filed with the Council, there shall be furnished to the Council an original and 20 copies. All filings from the applicant, parties, or intervenors must consist of an original and 20 copies, labeled with the docket number, properly collated and paginated, and bound. An electronic version of all filings, as appropriate, shall be provided.
- B. Bulk filing should be provided of not less than four (4) copies of the applicable town

zoning and Inland wetlands regulations (including a map showing the location of inland wetlands if relevant) and plan of development and any other publicly available material in support of the application. These documents shall include effective dates, revision dates, or dates of adoption. If no such dates are available, the document shall include the date the document was obtained.

- C. Applications filed for the purpose of any proceeding before the Council shall be printed or typewritten on paper cut or folded to letter size, 8 1/2 by 11 inches. Width of margins shall be not less than one inch. The impression shall be on only one side of the papers, unless printed, and shall be double spaced, except that quotations in excess of five typewritten lines shall be single spaced and indented. Mimeographed, multigraphed, photoduplicated, or the like copies will be accepted as typewritten, provided all copies are clear and permanently legible. In accordance with the State Solid Waste Management Plan, all filings should be submitted on recyclable paper, primarily regular weight white office paper. Applicants should avoid using heavy stock paper, colored paper, and metal or plastic binders and separators.
- D. Every original shall be signed by the applicant or by one or more attorneys in their individual names on behalf of the applicant. All applications shall be filed at the office of the Council, Ten Franklin Square, New Britain, Connecticut 06051. Service of all documents and other papers filed as applications, briefs, and exhibits, but not limited to those categories, shall be by personal delivery or by first class mail to the Council and all parties and intervenors to the proceeding, unless service has been waived.
- E. Any exhibits, sworn written testimony, data, models, illustrations, and all other materials that the applicant deems necessary or desirable to support the granting of the application shall be attached to the application. In addition, annexed materials shall include such exhibits, sworn written testimony, and other data that any statute or regulations may require. The applicant may request that administrative notice be taken of and refer in the application to portions of Council decisions and other government documents. Please note that all documents, including but not limited to maps, must be dated. If the document date is unavailable, the date the document was obtained shall be provided. Maps must include a key table(s) and a matching source list/table, appropriately organized.
- F. Applicants may present material in a sequence and format most appropriate for the particular proposal. To allow timely Council review, include with the application a copy of this form with page references for each item required in Section VI below.
- G. Potential applicants are urged to carefully review Connecticut General Statutes §§ 16-50*l*(e), 16-50*i* and 16a-7c to determine whether the proposed project falls within the Connecticut Energy Advisory Board (CEAB) "request-for-proposal" process.

IV. Application Filing Fees (Conn. Gen. Stat. §16-50/(a)(1); Conn. Gen. Stat. §4-189j; Regs., Conn. State Agencies § 16-50v-1a)

Conn. Gen. Stat. §16-50*l*(a)(1) mandates a municipal participation fee of \$25,000 to be deposited in the account established in accordance with Conn. Gen. Stat. §16-50bb.

The filing fee for an application is determined by the following schedule:

<u>Estimated Construction Cost</u> <u>Fee</u>

Up to	\$5,000,000	0.05% or \$1,250.00,
		whichever is greater;
Above	\$5,000,000	0.1% or \$25,250.00,
		whichever is less.

All application fees shall be paid to the Council at the time an application is filed with the Council. Additional assessments may be made for expenses in excess of the filing fee. Fees in excess of the Council's actual costs will be refunded to the applicant.

V. <u>Municipal Participation Account (Conn. Gen. Stat. §16-50bb; Conn. Gen. Stat. §16-50l/(a)(3))</u>

Conn. Gen. Stat. §16-50bb requires that each application be accompanied by a payment in the amount of \$25,000 to be deposited in a Municipal Participation Account within the General Fund to defray expenses incurred by each municipality entitled to receive a copy the application under Conn. Gen. Stat. § 16-50l that chooses to participate as a party to the certification proceeding. Any moneys remaining at the end of the proceeding shall be refunded to the applicant.

VI. Contents of Application (Conn. Gen. Stat. § 16-50l(a)(1)(B))

An application for a Certificate for the construction of an electric generating facility shall include the following:

- A. An executive summary. A description and the location of the proposed facility, including an artist's rendering and/or narrative describing its appearance, including but not limited to:
 - 1. Technical Specifications:
 - a. Service life and capacity factor;
 - b. Fuel type and supply;
 - c. Combustion technology;
 - d. Control systems, including pollution control technology;

Connecticut Siting Council Application Guide for Electric Generating Facilities Page 5 of 13

- e. Water use and effluent discharge;
- f. Air emissions;
- g. Waste disposal;
- h. Noise abatement:
- i. Provisions for emergency operations and shutdowns;
- j. Fire suppression technology;
- k. Safety warning system;
- 1. Proximity to municipal fire stations;
- m. Protective gear and control systems;
- n. Traffic flow and potential evacuation routes;
- o. Traffic safety and fuel spill risk assessment for access routes to the site;
- p. Provisions for leak detection of fuel and chemicals from storage areas; and
- q. Hazardous materials management and fuel spill prevention and control.
- 2. A demonstration of how the proposed facility would comply with Prevention of Significant Deterioration and Non-Attainment New Source Review requirements, identification of potential maximum emissions from proposed and alternative fuel combustion, and a summary of air pollution control technologies.
- 3. Alternative technologies, including:
 - a. Efficiency comparisons; and
 - b. Environmental comparisons.
- 4. An emergency management/evacuation plan.
- 5. Safety and reliability information, including:
 - a. Provisions for emergency operations and shutdowns; and
 - b. Fire suppression technology.
- 6. A Federal Aviation Administration determination for obstruction or hazard to air navigation.
- 7. Itemized estimated costs, including:
 - a. Plant and fuel;
 - b. Generating cost per kilowatt hour, both at the plant and related transmission line interconnection;
 - c. Comparative costs of alternatives considered; and
 - d. Life-cycle costs.
- 8. Information regarding the forecast of available fuel and backup fuel supply proposed for the facility, the State of Connecticut, New England, and the United States.
- 9. The location of existing and proposed pipelines or other infrastructure necessary to provide fuel and water to the proposed project including any upgrades necessary for the delivery of fuel and water to the facility during operation.

- 10. The source of fuel, water, and interconnections necessary for facility operation, the location of all infrastructure and pipelines with a map, the service area of the proposed infrastructure, other large users that may compete for the supply of fuel and water to the proposed facility, and under what circumstances fuel and water could be curtailed to the facility.
- 11. Details of alternative fuel supply including fuel compatibility, schedule and mechanism necessary for fuel switching, equipment requirements, and analysis of alternatives with a comparison of facility reliability with and without alternative fuel supplies.
- 12. A comparison, with a narrative and tabular reporting, of wet and dry cooling technologies, non-contact cooling, and use of gray water if applicable, including the estimated capital and operating costs, effects on air emissions, water use, water discharge, water recycling, effects on water resources and water diversions, noise, and spacial requirements of each technology under all operating scenarios.
- 13. An explanation of consistency with regional water supply and watershed protection plans and permit application or executed permit, if applicable, for the use of diverted water for cooling and other facility uses.
- 14. A storm water management plan with modeling to predict the quality and quantity of anticipated runoff and discharge.
- 15. The construction type of the transmission interconnection (overhead, underground, single circuit, double circuit) and the existing and expected transmission line loadings, substation interconnection plan, and the anticipated range of dispatch based on transmission grid constraints. Also, provide a final copy of, or a status report on, the independent system operator transmission grid interconnection study.
- 16. A statement and full explanation of why the proposed facility is needed and how the facility would conform to a long-range plan for the expansion of the electric power grid serving the state and interconnected utility systems that would serve the public need for adequate, reliable and economical service.
- 17. A justification for selection of the proposed site selected including a comparison with alternative sites which are environmentally, technically, and economically practicable. Include enough information for a complete comparison between the proposed site and any alternative site contemplated.
- 18. Justification that the location of the proposed facility would not pose an undue safety or health hazard to persons or property along the area traversed by the proposed facility including:
 - a. Measurements of existing electric and magnetic fields (EMF) at the

- boundaries of the facility site with extrapolated calculations of exposure levels during expected normal and peak line loading;
- b. Calculations of expected EMF levels at the boundaries of the facility site that would occur during normal and peak operation of the facility; and
- c. A statement describing consistency with the Council's "Best Management Practices for Electric and Magnetic Fields," as amended;
- d. A description of siting security measures for the proposed facility, consistent with the Council's "White Paper on the Security of Siting Energy Facilities," as amended; and
- e. A description of the effect that the proposed facility would have on the environment, ecology, and scenic, historic, and recreational values at and around the proposed site, and along new or expanded utility corridors, including effects on:
 - i. Public health and safety;
 - ii. Local, state, and federal land use, conservation, and development plans;
 - iii. Existing and future development;
 - iv. Adjacent land use;
 - v. Ecological integrity;
 - vi. Noise with baseline testing and modeling consistent with State regulations;
 - vii. Consistency with plans for development and protection of recreational areas and areas of natural history including areas of geologic, ecological, and archaeological interest;
 - viii. Visibility based on photographic simulation, artist renditions, and sight line profiles;
 - ix. Roads;
 - x. Wetlands and watercourses;
 - xi. Wildlife and vegetation, including rare and endangered species, critical habitats, and species of special concern, with documentation from the Department of Environmental Protection Natural Diversity Data Base;
 - xii. Public water supply watershed and aquifer areas, consistent with state and local conservation and development plans;
 - xiii. Archaeological and historic resources, with documentation by the State Historic Preservation Officer; and
 - xiv. Other environmental concerns identified by the applicant, the Council, or any public agency, including but not limited to, where applicable:
 - Coastal Consistency Analysis (C.G.S. §22a-90)
 - Connecticut Heritage Areas (C.G.S. §16a-27)
 - Ridgeline Protection Zones (C.G.S. §8-1aa)
 - Aquifer Protection Zones (C.G.S. §22a-354b)
 - DOT Scenic Lands (C.G.S. §13a-85a)

Connecticut Siting Council
Application Guide for Electric Generating Facilities
Page 8 of 13

- State Parks and Forests (C.G.S. §23-5)
- Agricultural Lands (C.G.S. §22-26aa)
- Wild and Scenic Rivers (C.G.S. §25-199)
- Protected Rivers (C.G.S. §25-200)
- Endangered, Threatened or Special Concern Species (C.G.S. §26-303)
- B. A statement and full explanation of why the proposed facility is necessary;
 - 1. for the reliability of the electric power supply of the state; or
 - 2. for a competitive market for electricity.
- C. A statement of loads and resources as described in Conn. Gen. Stat. § 16-50r;
 - 1. information on extent to which proposed facility is identified in and consistent with life cycle cost analysis and other advance planning; or
 - 2. an explanation for any failure of the facility to conform with such information.
- D. Safety and reliability information, including planned provisions for emergency operations and shutdowns;
 - 1. Historic and expected availability of all facility components;
 - 2. Availability of off-site resources such as water and fuel supply with resource plans documenting supply and capacity;
 - 3. All mechanisms for contingency in the event of fuel curtailment, water curtailment, facility flame-out, and electrical component failure; and
 - 4. The historic and expected availability of all necessary electric and fuel transmission infrastructure.
- E. Estimated cost information, including plant costs, fuel costs, plant service life and capacity factor and total generating cost per kilowatt hour, both at the plant and related transmission, and comparative costs of alternatives considered;
- F. A schedule showing the program for design, material acquisition, construction and testing, and operating dates;
- G. Available site information, including maps and description and present and proposed development, and geological, scenic, ecological, seismic, biological, water supply, population and load center data, including but not limited to a proposed site map(s) at a scale no smaller than 1 inch = 40 feet, a location map at a scale 1 inch = 2000 feet, and aerial photos of suitable scale showing the site, access, and abutting properties including proximity of the following:
 - 1. Settled areas;
 - 2. Schools and daycare centers;
 - 3. Hospitals;
 - 4. Group homes;
 - 5. Forests and parks;
 - 6. Recreational areas;
 - 7. Seismic areas:

Connecticut Siting Council
Application Guide for Electric Generating Facilities
Page 9 of 13

- 8. Scenic areas;
- 9. Historic areas;
- 10. Areas of geologic, ecological, or archaeological interest;
- 11. Areas regulated under the Inland Wetlands and Watercourses Act (to be delineated by a Connecticut Certified Soil Scientist on large scale 1 inch = 40 feet maps);
- 12. Areas regulated under the Tidal Wetlands Act and Coastal Zone Management Act (to be delineated by a Connecticut Certified Soil Scientist on large scale 1 inch = 40 feet maps);
- 13. Public water supply sources including wells, reservoirs, watersheds, and aquifers;
- 14. Hunting or wildlife management areas; and
- 15. Existing transmission lines within one mile of the site.
- H. Justification for adoption of the site selected, including comparison with alternative sites;
- I. Design information, including a description of facilities, plant efficiencies, electrical connections to the system, and control systems;
- J. A description of provisions, including devices and operations, for mitigation of the effect of the operation of the facility on air and water quality, for waste disposal, for noise abatement, and information on other environmental aspects including but not limited to:
 - 1. Construction techniques designed specifically to minimize adverse effects on natural areas and sensitive areas;
 - 2. Special design features made specifically to avoid or minimize adverse effects on natural areas and sensitive areas, or to restore degraded areas;
 - 3. Establishment of vegetation proposed near residential, recreational, and scenic areas;
 - 4. Methods for preservation of vegetation for wildlife habitat and screening, and
 - 5. Methods to replace any lost functions or reduced value of wetland areas affected by the proposed facility.
- K. A listing of federal, state, regional, district and municipal agencies from which approvals either have been obtained or will be sought covering the proposed facility, copies of approvals received and the planned schedule for obtaining those approvals not yet received.
- L. Bulk filing of the most recent conservation, inland wetland, zoning, and plan of development documents of the municipality, including a description of the zoning classification of the site and surrounding areas, and a narrative summary of the consistency of the project with the Town's regulations and plans.

Please note that all documents, including but not limited to maps, must be dated. If the document date is unavailable, the date the document was obtained shall be provided. Maps must include a key table(s) and a matching source list/table, appropriately organized.

VII. Proof of Service (Conn. Gen. Stat. § 16-50l (b))

Each application shall be accompanied by proof of service of such application on:

- A. The chief executive officer, the zoning commission, planning commission, the conservation and wetlands commissions, and the regional planning agencies which encompass the site municipality and any adjoining municipality having a boundary not more than 2500 feet from the facility;
- B. The State Attorney General;
- C. Each member of the Legislature whose district is in or is within 2500 feet from the municipality where the facility and any alternative is proposed;
- E. Any federal agency, department, commission or instrumentality which has jurisdiction over the proposed facility;
- F. The state Departments of Environmental Protection, Public Health, Public Utility Control, Economic and Community Development, Agriculture and Transportation; the Council on Environmental Quality; and the Office of Policy and Management; and
- G. Any such other state and municipal bodies as the Council may by regulation designate, including but not limited to, the State Historic Preservation Officer of the Commission on Culture and Tourism and the Department of Emergency Management and Homeland Security.

VIII. Notice to Community Organizations

In addition to the applicable notice requirements of Conn. Gen. Stat. §22a-20a under Section XII below, the applicant shall use reasonable efforts to provide notice of the application to the following:

- A. Affected community groups including Chambers of Commerce, land trusts, environmental groups, trail organizations, historic preservation groups, advocacy groups for the protection of Long Island Sound, and river protection organizations within the watershed affected by the proposed facility that have been identified by the municipality where the facility is proposed to be located or that have registered with the Council to be provided notice; and
- B. Any affected water company that would provide water to, or be within the watershed affected by, the proposed facility.

IX. Public Notice (Conn. Gen. Stat. § 16-501 (b))

Notice shall be made in accordance with all relevant sections of Conn. Gen. Stat. §16-50*l*(b). The Council's regulations should also be consulted when determining appropriate notice. Notice of the application shall be published at least twice prior to the filing of the application in a newspaper having general circulation in the site municipality or municipalities. The notice shall state the name of the applicant, the date of filing, and a summary of the application. The notice must be published in not less than ten point type.

The Council also advises each applicant that not less than 20 days prior to the public hearing such applicant should erect and maintain in a legible condition a sign not less than six feet by four feet at or in the vicinity of the proposed site. The sign shall set forth the name of the applicant, the type of facility, the public hearing date, and contact information for the Council (Web site and phone number).

Example:

PUBLIC NOTICE:

CL&P has filed an application with the Connecticut Siting Council (Council) for construction of an electric generating facility on this site. The Council will hold a public hearing on March 27, 2004 at the Newington Town Hall Auditorium at 3 and 7 p.m. A copy of the application can be reviewed at the town hall or at the Council offices in New Britain, CT. For more information, please contact the Council by telephone at 860-827-2935, electronically at www.ct.gov/csc, or by mail at 10 Franklin Square, New Britain, Connecticut 06051.

X. Notice to Abutting Landowners (Conn. Gen. Stat. § 16-50l(b))

Notice of the application shall be sent by certified or registered mail to each person appearing of record as an owner of property which abuts the primary or alternative sites on which the proposed facility would be located. Notice shall be sent at the same time that notice of the application is given to the general public.

The application shall be accompanied by an affidavit of notice to all abutting landowners and an affidavit of publication each time notice of application is published.

XI. Procedures

A. The Council will review and may reject the application within 30 days if it fails to comply with specific data or exhibit requirements or if the applicant fails to promptly correct deficiencies. (Regs., Conn. State Agencies §§ 16-50*l*-4 through 16-50*l*-5)

- B. The Council and any party or intervenor to the proceeding may file exhibits and interrogatories requesting supplemental or explanatory materials. All filings will be subject to cross-examination and the Council's discretion for admission into the record. (Conn. Gen. Stat. § 16-500)
- C. A public hearing must be held in the site county, usually in the site municipality, with one session held after 6:30 p.m. for the convenience of the public. The Council's record must remain open for 30 days after the close of the hearing. (Conn. Gen. Stat. § 16-50m)
- D. The Council must render a decision within 180 days of receipt of the application, extendible by 180 days upon consent of the applicant. (Conn. Gen. Stat. § 16-50p)

XII. Environmental Justice Public Participation Plan

Pursuant to Conn. Gen. Stat. §22a-20a, applicants seeking to obtain any certificate under PUESA, a new or expanded permit or siting approval from the Siting Council or DEP involving an "affecting facility" (defined in part as an electric facility with a capacity of more than ten megawatts) that is proposed to be located in an "environmental justice community" (defined as a U.S. census block group for which 30% or more or the population consists of low income persons with income below 200% federal poverty level or a "distressed municipality" as defined under C.G.S. §32-9p) or the proposed expansion of an "affecting facility" located in such community shall file a "Meaningful Public Participation Plan."

The definition of "affecting facility" does NOT include (i) the portion of an electric generating facility that uses nonemitting and nonpolluting renewable resources such as wind, solar and hydropower or that uses fuel cells; (ii) any facility for which a certificate of environmental compatibility and public need was obtained from Council on or before January 1, 2000; or (iii) a facility of a constituent unit of the state system of higher education that has been the subject of an environmental impact evaluation in accordance with the provisions of sections 22a-1b to 22a-1h inclusive, of the General Statutes and such evaluation has been determined to be satisfactory in accordance with Section 22a-1e of the General Statutes.

XIII. Prohibition of use of flammable gas to clean piping (Conn. Gen. Stat. §16-50ii)

Pursuant to Conn. Gen. Stat. §16-50ii, the use of flammable gas to clean or blow the gas piping of an electric generating facility is prohibited. Applicants seeking a certificate or petitioners seeking a declaratory ruling for an electric generating facility shall demonstrate to the satisfaction of the Council that the applicant or petitioner has:

1. Retained, for the duration of the construction project, at least one special inspector to assist the municipal fire marshal in reviewing construction plans and conducting inspections

Connecticut Siting Council Application Guide for Electric Generating Facilities Page 13 of 13

during construction of the electric generating facility to ensure compliance with the recommended standards. Any person designated as a special inspector shall:

- a. Be approved by the Council and not otherwise employed or financially involved in the construction or operation of the electric generating facility; and
- b. Be a licensed professional mechanical engineer pursuant to chapter 391 of the Connecticut General Statutes or a person holding a commission from the National Board of Pressure Vessel Inspectors and have knowledge and field experience in electric generating facility construction.

The special inspector shall have the following duties:

- A. To assist the local fire marshal in review and approval of methods for cleaning the interior of gas piping;
- B. To approve an appropriate safety plan for any nonflammable gas blows conducted at the facility;
- C. To observe the actual cleaning procedure in order to assure compliance with the approved methods for cleaning the interior of gas piping; and
- D. To conduct inspections during construction of such facility in order to ensure compliance with the approved methods and with the provisions of this section.
- 2. Paid a fee to be established in accordance with subsection (d) of Section 29-251c of the Connecticut General Statutes and deposited in the Code Training Fund established under that Section to be used in the training of local fire marshals on the complex issues of electric generating facility construction.
- 3. Any person who violates any provision of Section 16-50ii of the Connecticut General Statutes shall be fined not more than one hundred thousand dollars or imprisoned not more than two years, or both, for each offense.

PLEASE NOTE THAT THIS GUIDE IS NO SUBSTITUTION FOR OBTAINING ADVICE FROM LEGAL COUNSEL. IN THE EVENT OF ANY CONFLICT BETWEEN THIS GUIDE AND THE ACTUAL STATUTES AND REGULATIONS, THE STATUTES AND REGULATIONS SHALL GOVERN.